

CLAIMS

I claim:

1. (original) A vehicle suspension system capable of providing:
 - a) means for a dynamic weight jacking with said weight jacking being controlled by steering angle, and
 - b) whereby an incremental clockwise rotation of the steering wheel will cause said weight jacking to incrementally but not necessarily linearly increase weight on the right front tire and left rear tire, and decrease weight on the left front tire and right rear tire, and
 - c) whereby an incremental counterclockwise rotation of the steering wheel will cause said weight jacking to incrementally but not necessarily linearly increase weight on the left front tire and right rear tire, and decrease weight on the right front tire and left rear tire.
2. (original) The suspension in claim 1 whereby the means of weight jacking the vehicle is accomplished by changing the geometry of an anti-swaybar.
3. (original) The suspension in claim 2 whereby the change in geometry of said anti-swaybar is controlled by a mechanical linkage.
4. (original) The suspension in claim 3 whereby said mechanical linkage connects a steering member or suspension member which moves with movement of the steering to a rocker assembly. Said rocker assembly is then connected to said anti-swaybar or a droplink for said anti-swaybar.
5. (original) The suspension in claim 3 whereby said mechanical linkage connects a steering member or suspension member which moves with movement of the steering, to an eccentric mount for said anti-swaybar. Said eccentric mount is configured to move the anti-swaybar relative to a chassis support, with movement of the steering.

6. (original) The suspension in claim 1 whereby the means of changing said dynamic weight jacking is accomplished through the use of one or more of a secondary spring.
7. (original) The suspension in claim 1 whereby the means of changing said dynamic weight jacking is accomplished through a change in preload of one or more of a main suspension spring.
8. (original) The suspension in claim 7 whereby said change in preload of said main suspension spring is accomplished through a threaded collar on a strut assembly.
9. (original) The suspension in claim 1 whereby said means of weight jacking the vehicle allows variable adjustment for the amount of weight jacking for a given change in steering angle.
10. (original) The suspension in claim 2 whereby the geometry of said anti-swaybar is changed through a variable length drop link.
11. (original) The suspension in claim 10 whereby said drop link contains a hydraulic cylinder.
12. (original) The suspension in claim 1 whereby the means of changing said dynamic weight jacking is implemented through mechanical means.
13. (original) The suspension in claim 1 whereby the means of changing said dynamic weight jacking is accomplished through pneumatic means.
14. (original) The suspension in claim 1 whereby the means of changing said dynamic weight jacking is accomplished through hydraulic means.

15. (original) The suspension in claim 1 whereby the means of changing said dynamic weight jacking is accomplished through electric means.

16. (original) A vehicle suspension assembly capable of:

- a) transmitting force applied at a steering wheel to a change in vertical load at a wheel, and
- b) whereby an incremental clockwise rotation of said steering wheel will cause said change in vertical load to incrementally but not necessarily linearly increase vertical load on the right front tire and left rear tire, and decrease vertical load on the left front tire and right rear tire, and
- c) whereby an incremental counterclockwise rotation of said steering wheel will cause said change in vertical load to incrementally but not necessarily linearly increase on the weight weight left front tire and right rear tire, and decrease weight on the right front tire and left rear tire.

17. (original) The suspension in claim 16 whereby the means of said change in vertical load is implemented through mechanical means.

18. (original) The suspension in claim 16 whereby the means of said change in vertical load is accomplished through pneumatic means.

19. (original) The suspension in claim 16 whereby the means of said change in vertical load is accomplished through hydraulic means.